

REMARKS

Initially, Applicant would like to express appreciation to the Examiner for the detailed Official Action provided.

Applicants acknowledge with appreciation the Examiner's indication of allowable subject matter in claim 3.

Upon entry of the above amendment, claim 6 will have been amended. Accordingly, claims 3, 4, and 6 are currently pending. Applicants respectfully request reconsideration of the outstanding rejections and allowance of claims 3, 4, and 6 in the present application. Such action is respectfully requested and is now believed to be appropriate and proper.

The Examiner has rejected claim 6 under 35 U.S.C. § 102(e) as being anticipated by BURGESS et al. (U.S. Patent Application Publication No. 2003/0114853).

Although Applicants do not necessarily agree with the Examiner's rejection of the claim on this ground, nevertheless, Applicants have amended independent claim 6 to clearly obviate the above noted ground of rejection in order to expedite prosecution of the present application. In this regard, Applicants note that BURGESS et al. fails to show each and every element recited in the amended claim. In particular, claim 1, as amended, sets forth a rod connector including, inter alia, a connector main body swingably attached to a shank, a rod supporting portion in the connector main body, and "a pressure fixing device for pressure fixing the rod to the rod supporting portion of the connector main body, wherein a rear end of the shank comprises a flange portion that is configured to prevent removal of the shank from an engaging member". As shown in the figures and described in the specification, Applicants' claimed rod connector includes a shank portion 3. The

shank portion 3 is provided with the flange portion 5, which prevents the rod connector 1 from coming off of or being separated from the U-shaped engagement groove of the screw S in the axial direction of the screw. See particularly figures 3 and 4; and the specification, page 4, lines 1-4. Accordingly, Applicants' claimed invention includes an engagement groove in the engagement member. The flange portion 5 prevents removal, in the axial direction, of the shank portion 3 from the engagement member S.

The BURGESS et al. patent publication discloses several embodiments of a connector including a main body swingably attached to a transverse member. The transverse member includes a distal end including a ball, and a proximal end. As shown in the figures, the transverse member is slightly arc-shaped and the proximal end appears to include a turned-up portion at the tip of the proximal end. The proximal end of the transverse member does not include a flange. Moreover, the proximal end does not include any collar, rim, or rib that could fairly be read as a flange; nor does the proximal end include any shaped portion that could fairly be read as a flange, or any member that could fairly be read as a flange.

Additionally, the proximal end of the transverse member does not include any configuration or shape that would prevent removal of the transverse member from an engaging member.

Further, it is noted that the Examiner has stated that the wrap around member 90 corresponds to Applicants' claimed flange portion. Additionally, the Examiner has stated that the manner in which the flange is to be employed does not differentiate the claimed apparatus from the prior art apparatus. However, Applicants respectfully submit that the

wrap around member 90 is provided in the BURGESS et al. device to prevent separation of a first transverse member 82 and a second transverse member 84 *in the transverse direction* of the transverse members. The wrap around member 90 does not prevent removal of the first and/or second transverse members from the C-clamp 86 in the longitudinal direction of the transverse members. The wrap around member 90 connects to a proximal end 93 of the second transverse member 84 and only wraps around the first transverse member 82. See particularly paragraph [0035] of BURGESS et al. Therefore, the BURGESS et al. device does not include a shank with a flange at an end thereof that prevents removal of the shank from an engaging member.

Thus, the BURGESS et al. patent publication does not show a rod connector including, inter alia, a connector main body swingably attached to a shank, a rod supporting portion in the connector main body, and "a pressure fixing device for pressure fixing the rod to the rod supporting portion of the connector main body, wherein a rear end of the shank comprises a flange portion that is configured to prevent removal of the shank from an engaging member" as set forth in amended claim 1. Since the reference fails to show each and every element of the claimed device, the rejection of claim 1 under 35 U.S.C. § 102(e) over BURGESS et al. is improper and withdrawal thereof is respectfully requested.

The Examiner has rejected claim 4 under 35 U.S.C. § 103(a) as being unpatentable over BURGESS et al. in view of JACKSON et al. (U.S. Patent No. 5,716,355).

However, Applicants note that BURGESS et al. and JACKSON et al. fail to teach or suggest the subject matter claimed in claim 4. In particular, claim 4 sets forth a rod

connector including, inter alia, a connector main body swingably attached to a shank, a rod supporting portion, and "a pressure fixing device for pressure fixing the rod to the rod supporting portion of the connector main body, wherein a supporting surface of the rod supporting portion comprises a rough surface". Applicants' claimed invention includes a rod connector having a rod supporting portion. The rod supporting portion includes a supporting surface that is rough. The roughness of the supporting surface may be produced by a method such as sand blasting. The rough supporting surface of the rod supporting portion of Applicants' claimed invention contacts and digs into the rod, thus preventing rotation and axial movement of the rod, improving the rod connector's grip on the rod.

As recognized by the Examiner, the BURGESS et al. publication fails to teach or suggest a rod supporting portion including a rough surface, as set forth in claim 4.

The JACKSON et al. patent is directed to a spinal rod transverse connection. As can be seen in figure 2, the JACKSON et al. device includes pivot base 21 that includes a spinal rod receiving aperture through which a spinal rod 13 extends. The spinal rod receiving aperture includes teeth 26 that assist in securing the pivot base 21 onto the spinal rod 13 when the set screw 23 is tightened onto the spinal rod 13. See particularly column 2, lines 49-56.

Contrary to the Examiner's assertions, there is nothing in the cited prior art that would lead one of ordinary skill in the art to make the modifications suggested by the Examiner in the rejection of claim 4 under 35 U.S.C. § 103(a) over BURGESS et al. in view of JACKSON et al. Thus, the only reason to combine the teachings of BURGESS et al.

and JACKSON et al. results from a review of Applicants' disclosure and the application of impermissible hindsight.

Moreover, the JACKSON et al. patent fails to cure the deficiencies of the BURGESS et al. device. In this regard, it is noted that JACKSON et al. teaches that the spinal rod receiving aperture is provided with "axially extending serrations or teeth 26". Axially extending serrations or teeth are unlike a rough surface produced by a method such as sand blasting, as described in Applicants' specification, including the drawings. Therefore, JACKSON et al. fails to teach or suggest a rod supporting portion "wherein a supporting surface of the rod supporting portion comprises a rough surface", as recited in claim 4.

Thus, the JACKSON et al. patent fails to cure the deficiencies of the BURGESS et al. device, and even assuming, arguendo, that the teachings of BURGESS et al. and JACKSON et al. have been properly combined, Applicants' claimed rod connector with a rod supporting portion "wherein a supporting surface of the rod supporting portion comprises a rough surface" would not have resulted from the combined teachings thereof.

Accordingly, the rejection of claim 4 under 35 U.S.C. § 103(a) over BURGESS et al. in view of JACKSON et al. is improper for all the above reasons and withdrawal thereof is respectfully requested.

Accordingly, Applicants respectfully request reconsideration and withdrawal of all the rejections, and an early indication of the allowance of claims 3, 4, and 6.

SUMMARY AND CONCLUSION

In view of the foregoing, it is submitted that the present amendment is proper and that none of the references of record, considered alone or in any proper combination

thereof, anticipate or render obvious Applicants' invention as recited in claims 3, 4, and 6.

The applied references of record have been discussed and distinguished, while significant claimed features of the present invention have been pointed out.

Accordingly, consideration of the present amendment, reconsideration of the outstanding Official Action, and allowance of the present amendment and all of the claims therein are respectfully requested and now believed to be appropriate.

Applicants have made a sincere effort to place the present application in condition for allowance and believe that they have now done so.

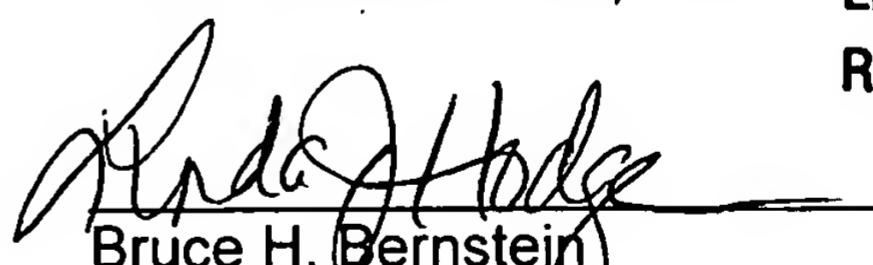
Any amendments to the claims which have been made in this amendment, which do not narrow the scope of the claims, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered cosmetic in nature, and to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should there be any questions, the Examiner is invited to contact the undersigned at the below listed number.

Respectfully submitted,
Nobumasa SUZUKI, et al.

Linda J. Hodge

Reg. #47,348



Bruce H. Bernstein
Reg. No. 29,027

July 3, 2006
GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191